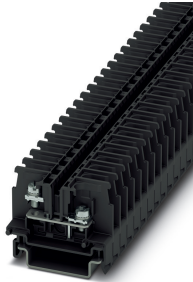


## Feed-through terminal block - BTO 2,0 - 3281107

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Feed-through terminal block, with an open screw shaft, nom. voltage: 690 V, nominal current: 24 A, connection method: Ring cable lug, number of connections: 2, width: 8 mm, color: black, mounting type: NS 35/7,5, NS 35/15

### Your advantages

- ✓ Maximum overview thanks to extensive marking and labeling of every terminal point
- ✓ Convenient ring cable lug connection thanks to the screw connection principle with spring-guided screw; maintenance-free with integrated screw locking
- ✓ Easy potential distribution with time-saving jumper system
- ✓ Safety for users thanks to integrated shock protection
- ✓ Reduction in logistics costs with the uniform CLIPLINE complete system accessories



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 055626 118079
GTIN	4055626118079
Weight per Piece (excluding packing)	7.600 g
Custom tariff number	85369010
Country of origin	India

### Technical data

#### General

Number of levels	1
Number of connections	2
Potentials	1

## Feed-through terminal block - BTO 2,0 - 3281107

### Technical data

#### General

Nominal cross section	2.5 mm <sup>2</sup>
Color	black
Insulating material	PC
Flammability rating according to UL 94	V0
Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	IIIa
Maximum power dissipation for nominal condition	0.77 W
Maximum load current	24 A
Nominal current I <sub>N</sub>	24 A
Nominal voltage U <sub>N</sub>	690 V
Open side panel	Yes
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Note regarding shock protection	Finger safety is only guaranteed with cover profile.
Result of surge voltage test	Test passed
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	1.89 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of flexion and pull-out test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	2.5 mm <sup>2</sup> / 0.7 kg
Tensile test result	Test passed
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	1 N
Result of voltage-drop test	Test passed
Result of temperature-rise test	Test passed
Requirement temperature-rise test	Increase in temperature ≤ 45 K
Short circuit stability result	Test passed
Conductor cross section short circuit testing	2.5 mm <sup>2</sup>
Short-time current	0.3 kA
Conductor cross section short circuit testing	2 mm <sup>2</sup>
Short-time current	0.24 kA

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## Technical data

### General

Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 2, bogie-mounted
Test frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C

### Dimensions

Width	8 mm
Length	42 mm
Height NS 35/7,5	33.5 mm
Height NS 35/15	41 mm

### Connection data

Connection method	Ring cable lug
Stripping length	The stripping length depends on the specification provided by the cable lug manufacturer.
Connection in acc. with standard	IEC 60947-7-1
Cable lug connection according to standard	DIN 46234:1980-03
Min. cross section for cable lug connection	0.14 mm <sup>2</sup>
Max. cross section for cable lug connection	2.5 mm <sup>2</sup>
AWG min	26
AWG max	16
Hole diameter, min.	3.7 mm
Cable lug width, max.	6.8 mm
Bolt diameter	3.5 mm

## Feed-through terminal block - BTO 2,0 - 3281107

### Technical data

#### Connection data

Screw thread	M3,5
Tightening torque, min	1 Nm
Tightening torque max	1.3 Nm
Connection in acc. with standard	JIS 8207-7-1
Cable lug connection according to standard	JIS 8207-7-1
Min. cross section for cable lug connection	0.5 mm <sup>2</sup>
Max. cross section for cable lug connection	2 mm <sup>2</sup>
Hole diameter, min.	3.7 mm
Cable lug width, max.	6.8 mm
Bolt diameter	3.5 mm
Screw thread	M3,5
Tightening torque, min	1 Nm
Tightening torque max	1.3 Nm

#### Ambient conditions

Operating temperature	-60 °C ... 85 °C
Ambient temperature (storage/transport)	-25 °C ... 55 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Permissible humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C

#### Standards and Regulations

Connection in acc. with standard	IEC 60947-7-1
	JIS 8207-7-1
Flammability rating according to UL 94	V0

#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

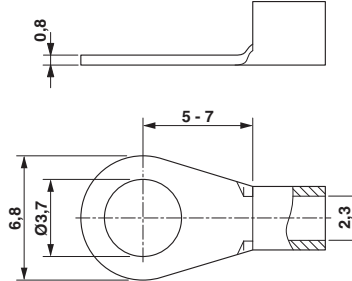
### Drawings

# Feed-through terminal block - BTO 2,0 - 3281107

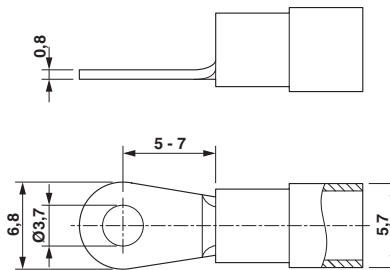
Circuit diagram



Dimensional drawing



Dimensional drawing



## Classifications

eCl@ss

eCl@ss 10.0.1	27141120
eCl@ss 11.0	27141120
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141120
eCl@ss 9.0	27141120

ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000897

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## Classifications

### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

## Approvals

### Approvals


#### Approvals

DNV GL / CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized

#### Ex Approvals

### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE00001S2
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CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	15 A	15 A	
mm <sup>2</sup> /AWG/kcmil	26-14	26-14	

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## Approvals

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	15 A	15 A	
mm <sup>2</sup> /AWG/kcmil	26-14	26-14	

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	15 A	15 A	
mm <sup>2</sup> /AWG/kcmil	26-14	26-14	

EAC		RU C- DE.BL08.B.00541
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cULus Recognized	
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